UNITED STATES PATENT AND TRADEMARK OFFICE

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Susan M. Donahue
Rockwell Automation, 704-P, IP Department
1201 South 2nd Street
Milwaukee, WI 53204

EXAMINER
KENNEDY, ADRIAN L

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2003*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.
    4a) Of the above claim(s) *18-48* is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-17* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *26 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

Examiner's Detailed Office Action

1.   This Office Action is responsive to **Response to Restriction Requirement** filed **March 10, 2010**.

2.   **Claims 1-17** are ready for examination by the examiner.

Election/Restrictions

3.   Claims 18-48 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on **March 10, 2010**.

4.   Applicant's election with traverse of Groups II - XI in the reply filed on **March 10, 2010** is acknowledged. The traversal is on the ground(s) that 1) The examination of the claims does not impose a serious burden on the Examiner and 2) the invention does not embody multiple distinct inventions. This is not found persuasive because of the following:

       Regarding the first and second grounds, M.P.E.P. §808.02 which specifically states that a restriction is proper if the examiner can show:

> (C)   **A different field of search** : Where it is necessary to search for one of the inventions in a manner that is not likely to result in finding art pertinent to the other invention(s) (e.g., searching different classes /subclasses or electronic resources, or employing different search queries, a different field of search is shown, even though the two are classified together. The indicated different field of search must in fact be pertinent to the type of subject matter covered by the claims. Patents need not be cited to show different fields of search.

Furthermore, the plurality of claimed inventions which would each require "employing

different search queries...even though the [inventions] are classified together".

Additionally regarding M.P.E.P. §808.05(c), the examiner takes the position the position

that 1) the various claimed combinations **do not** require the particulars of the subcombination

and that 2) the claimed sub-combinations have utility in and of themselves as previously argued

in the Restriction Requirement data 02/16/2010. The examiner is open to discuss explicitly why

the "applicants' representative respectfully disagrees" with the examiner's application of

M.P.E.P. §808.05(c) in subsequent correspondence in light. Specifically, the examiner will

consider any evidence or arguments which may be in opposition examiner's application of

M.P.E.P. §808.05(c).

Finally, it is the examiner position that the inventions are distinct under M.P.E.P.

§808.05(c) and present a serious burden to the examiner under M.P.E.P. §808.02.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

     1.   Determining the scope and contents of the prior art.

     2.   Ascertaining the differences between the prior art and the claims at issue.

     3.   Resolving the level of ordinary skill in the pertinent art.

     4.   Considering objective evidence present in the application indicating obviousness
          or nonobviousness.

7.   Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wolff et al.**

(USPubN 2003/0120714, referred to as Wolff) in view of the **"Examiner's Taking of Official**

Notice".

Regarding claim 1

Wolff teaches,

     a processor (Wolff: ¶ 0039);

     a memory communicatively coupled to the processor, the memory having stored therein

     computer-executable instructions configured to implement the system (Wolff: ¶ 0039)

     including:

     a device analyzer that determines properties, limitations, or software plug-ins associated

     with a plurality of devices intended for delivery of data (Wolff: ¶ 0017; Examiner's

     Interpretation(EI): The examiner takes the position that the applicant's claimed "device

     analyzer" is obvious in the invention of Wolff. This positions is based on the fact that the

     determining of the appropriate data speed and resolution (i.e. properties and/or

     limitations) would not have been possible without some form of a "device analyzer" in

     the teachings of Wolff. Furthermore, the examiner asserts that the broadly claimed

     "device analyzer" would have been obvious in light of Wolff teaching the function of

     determining "limitations and/or properties".);

a Human Machine Interface (HMI) generator that generates code or data for the HMI in

accordance with the determined properties of the devices, and delivers the code or data to

the respective devices (Wolff: ¶ 0017; EI: The examiner takes the position that that it

would have been obvious to one of ordinary skill in the art at the time of invention that in

transforming data from one format to another format, that the new data has to be

"generated".);

a communications component that maps data path information to data delivered to one of

the devices to enable communication between the data and the HMI (Wolff: EI: The

examiner takes the position that the mapping as claimed by the applicant would have

been obvious to one of ordinary skill in the art in light of the teachings of Wolff.

Additionally, the examiner takes the position that it would not have been possible to

provide the data to the interface without there being a path mapped to said interface. The

motivation for doing so would be to enable communications between devices that use the

same or different communication format and/or to enable the link of devices which don't

directly know communication routes.); and

a processing component that renders one or more multi-dimensional software objects

based at least in part on the properties, limitations, software plug-ins of the device, or any

combination thereof (Wolff: ¶ 0017; Examiner's Note(EN): The examiner takes the

position that the applicant's claimed "processing component" would have been obvious

in light of the teachings of Wolff. This position is based on the fact that the providing of

data at the proper appropriate data speed and resolution (i.e. properties and/or limitations)

would not have been possible without some form of a "processing component" that

formats (i.e. "renders") the data in the teachings of Wolff. Furthermore, the examiner

asserts that the applicant's broadly claimed "processing component" would have been

obvious in light of Wolff teaching the function of determining "limitations and/or

properties". Regarding, the "multi-dimensional software objects" as claimed by the

applicant, the examiner takes the position that the applicant's claiming would have been

obvious to one of ordinary skill in the art in light of Wolff teaching the presentation

various images in the proper format and it being known at the time of invention that

images can be "multi-dimensional software objects". Finally, in not clearly defining

"multi-dimensional software objects" in the claimed of disclosed invention the examiner

asserts that the applicant's claiming would have been obvious in light of the teachings of

Wolff.).

It would have been obvious to one of ordinary skill in the art at the time of invention to

modify the human machine interface taught by Wolff.

The motivation for doing so would be to facilitate the operation of a human/machine

interface (Wolff: ¶ 0016).

Regarding claim 2:

Wolff teaches,

> (Previously Presented) The system wherein the device analyzer further comprising a
>
> memory or a processor (Wolff: Figs 2 and 3; processing element 280 and memory 282;
>
> page 4, ¶ 0038 and 0039).

Regarding claim 3:

Wolff teaches,

> (Previously Presented) The system wherein the processor utilizes artificial intelligence to
>
> render the data (Wolff: ¶ 0052).

Regarding claim 4:

Wolff teaches,

> (Previously Presented) The system wherein the processor employs artificial intelligence
>
> in connection with manipulating a mapping (Wolff: ¶ 0043-0044; EN: The examiner
>
> takes the position that the applicant's claimed "manipulating" would have been obvious in
>
> light of Wolff teaching the modifying of the application interface.).

Regarding claim 5:

Wolff teaches,

> (Previously Presented) The system wherein the HMI generator automatically modifies the
>
> code or data associated with an existing HMI for display on a new device for which the
>
> existing HMI is not configured, the code or data is modified according to the determined
>
> properties of the new device (Wolff: ¶ 0052; EN: The examiner takes the position that it
>
> would have been obvious to one of ordinary skill at the time of invention that when
>
> converting data from one format to another that new data is generated.).

Regarding claim 6:

Wolff teaches,

> (Previously Presented) The system employed in a processing environment including at
>
> least one of a personal computer, a desktop computer, a laptop computer, a personal
>
> digital assistant, a hand-held computer, a cell phone, a tablet computer (Wolff: ¶ 0017),
>
> or any combination thereof.

Regarding claim 7:

Wolff teaches,

> (Previously Presented) The system wherein the device coupled to the HMI generator is
>
> least one of a display, a data store, a server, (Wolff: Fig. 2, display 250, ¶ 0033) or any
>
> combination thereof.

Regarding claim 8

Wolff teaches,

> (Previously Presented) The system wherein the HMI generator further comprising:
>
> an input component that obtains a common data input for the multi-dimensional software
>
> objects (Wolff: EI: Having not further defined "common data input" in the claimed
>
> invention, the examiner takes the position that the claimed "common data input" would
>
> have been obvious in light of the teachings of Wolff. The motivation for using "common
>
> input data" is so the software objects can share similar input when being rendered.).

Regarding claim 9

Wolff teaches,

> (Previously Presented) The system wherein the multi-dimensional software object is
> assigned specific data (Wolff: EI: The examiner takes the position that it would have
> been obvious to one of ordinary skill in the art at the time of invention for the software
> objects to use specifically designed data. The motivation for doing this would be to
> ensure that the rendered representations of image(s) represent the proper real world object
> that is being imaged.).

Regarding claim 10

Wolff teaches,

> (Previously Presented) The system wherein the specific data varies at least one of size,
> color, translational location, rotation of a software object, text, audio, video, visibility,
> enable or disable state, object state, object type, object text, trending zoom level (Wolff: ¶
> 0030), audio volume, specification of audio clips, specification of video clips, starting,
> stopping animation, or any combination thereof.

Regarding claim 11

Wolff teaches,

> (Previously Presented) The system wherein a change to the common data input affects
> the multi-dimensional software objects (Wolff: ¶ 0033; EI: The examiner takes the
> position that it would have been obvious to one of ordinary skill in the art at the time of

invention in light of Wolff teaching that his rendered "objects" are dependent on the data

inputs.).

Regarding claim 12:

Wolff teaches,

a correlation component that associates one or more software objects with one or more

physical devices (Wolff: Fig. 2, images sensor 220; ¶ 0031); and

an object generation component that builds software objects associated with data

corresponding to the physical devices (Wolff: ¶ 0043),

the physical devices affecting changes to the software objects and the software objects

affecting changes to the physical devices (Wolff: ¶ 0085; EN: The examiner takes the

position that the applicant's claimed physical device affecting software object and vice

versa reads on the two way communication taking place between sensor and controller

interfaces.).

Regarding claim 13:

Wolff teaches,

(Previously Presented) The system wherein the software objects are imported from an

outside source (Wolff: ¶ 0046, generic application that includes GUI objects is loaded

over the communication link).

Regarding claim 14:

Wolff teaches,

> (Previously Presented) The system further comprising an interface that selects data to
> associate with the physical devices (Wolff: Fig. 9; ¶ 0069; EN: The examiner takes the
> position that the applicant's claimed "interface" which has not been further defined, reads
> on the setup page taught by Wolff.).

Regarding claim 15:

Wolff teaches,

> (Previously Presented) The system further comprising an interface that selects specific
> attributes of software objects corresponding to data associated with the physical devices
> (Wolff: ¶ 0065).

Regarding claim 16:

Wolff teaches,

> (Previously Presented) The system wherein the processing component renders data based
> at least in part on a user access data level, a data type, a data state that employs the
> processing component in an HMI residing in a processing environment, or any
> combination thereof (Wolff: ¶ 0066; EN: The examiner takes the position that the
> applicant's claimed "processing component" which has not been further defined in the
> claimed invention, reads on the web browser taught by Wolff. Furthermore, it would
> have been obvious to one of ordinary skill in the art at the time of invention at the time of
> invention that a web browser renders data based on the data's "data type".).

Regarding claim 17:

Wolff teaches,

> (Previously Presented) The system further comprising a user-based association between
> displayed data and at least one of a user access level, a data type, a data state (Wolff: Fig.
> 8 owner window 818, ¶ 0067 discloses associating data with a particular user), or any
> combination thereof.

Conclusion

Examiner's Opinion:

- The examiner respectfully requests that should the applicant submit further
  correspondence, that the applicant contact the examiner prior to said submittal in
  order to facilitate compact prosecution.

Claims 1-17 are rejected.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Adrian L. Kennedy whose telephone number is (571) 270-1505.
The examiner can normally be reached on Mon -Fri 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ALK/

/Donald Sparks/

Supervisory Patent Examiner, Art Unit 2129